GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:417
ANSWERED ON:24.07.2001
NEW PROJECTS UNDERTAKEN BY TIFAC
PAWAN KUMAR BANSAL

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Technology Information Forecasting and Assessment (TIFAC) has undertaken some new projects;

(b) if so, the details thereof; and

(c) the names of States which have been covered under the Jai Vigyan Mission and the activities taken up by them so far in these States?

Answer

MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT)

(a) Yes, Sir.

(b) A Statement (Part-I) is attached.

(c) Twenty-one Jai Vigyan National Science and Technology Mission Projects are under implementation in different States across the country.

The activities undertaken are given in Part-II of the Statement.

PART-I

STATEMENT AS REFERRED IN REPLY TO PART (b) & (c) OF THE LOK SABHA UNSTARRED QUESTION NO. 417 DUE REPLY ON 24.07.2001REGARDING NEW PROJECTS UNDERTAKEN BY TIFAC

S.No	Title of proj.	States covered	Objectives/field of study	Total project cost (Rs.in lacs)	Tenure made so far	Progress Any other relevant information
	AGRICULTURE @					
1.	Bihar Project	Bihar	Improvement of agricultural productivity of the region through following total Systems Approach Technologies. Project design has been conceived after carrying out a bench mark survey based on soil testing, rainfall data analysis,existing management practices etc.	34.60		In progress
2.	Deoria Project	Uttar Pradesh	do	13.00		In progress
3.	Kancheepuram Project	Tamil Nadu	do	10.00		In progress

4. Orissa Project	Orissa	The main objective is creation of tiny water resource, utilization of the created water resource for improvement of agricultural productivity of the region through following total Systems Approach Technologies.	22.99		In progress
5. NAF Project	Tamil Nadu	To increase the quality of rural life and increasing the employment opportunities.Impact of micronutrients to enhance the productivity of various crops will also be studied.	56.44		In progress
6. Sikkim Project	Sikkim	Improvement of agricultural productivity of the region through following total Systems Approach Technologies. Project design has been conceived after carrying out a bench mark survey based on soil testing, rainfall data analysis, existing management practices etc.	10.00		In progress
7. Jharkhand Project	Jharkhand	Bench mark survey to assess the natural resources, productivity of different crops, to understand the existing agricultural management practices, fertility status etc.	0.60		In progress
8. Uttaranchal Project (Pinder valley)	Uttaranchal	Green house establishment towards raising fruits, vegetables etc. nursery, demonstration of micro hydel power generation, drying of Apricot and overall agri-cultural development.	43.28		In progress

@ Figure quoted under the total project cost head is the amount released by TIFAC so far; further release will be made as per the future requirement of the project

AGRO-FOOD PROCESSING

1. Punjab MILKFED Project	Punjab	Improvement in Milk Quality & Yield through better Milk Farm Management [TIFAC commitment - 100 lacs]	200.00	1 year Under implementation.	Bactoscan implemented first time in Inida.
2. KOMUL Project	Karnataka	Improvement in Milk Quality & Yield through better Milk [TIFAC	216.00	1 year	In progress. Concept of committee milking parlour first

	Farm Management ment - 100 lacs]	commit-	time in India.		
3. APDDCF Project & Yield through better Milk Farm Management ment - 100 lacs]	Andhra Pradesh	Improvement in Milk Quality [TIFAC	commit-	209.25	1 year In progress.
4. BAIF Project livestock for sustainable livelihood ment - 100 lacs]	Maharashtra	Genetic improvement of Dairy [TIFAC	commit-	239.86	3 years In progress. Embryo transfer technology focussed to the field level.

ROAD CONSTRUCTION AND TRANSPORTATION EQUIPMENT

1. Development of Disaster Management Equipment Project	Karnataka	To design and realise mobile equipment capable of deploy- ment to demolish the damaged buildings in case earthquakes etc. at a faster rate	[TIFAC commit- ment - 210.00]	210.00	15 mths In progress.
2. Development of Radio Control System	Karnataka	To provide remote control capability for operating the machine (without physical connection between the operator and the machine).	[TIFAC Commit- ment - 150.00]	150.00	15 mths In progress.
3. Road Milling Machine Project	Gujarat	To develop two prototypes (first one having 70% import content and second one with 30% import content containing mainly hydraulic and milling cutter tools)	[TIFAC Commit- ment - 222.61]	445.22	2 years In progress.
4. Paver Finisher Project	Gujarat	To develop two prototypes for 7 meter and 9 meter with minimum import content cont- aining mainly hydraulics and controls of paver finisher	[TIFAC commit- ment - 384.38]	768.77	2 years In progress.
5. Bitumen indirect heating equipment	Gujarat	To develop 2 prototypes of tank sizes 20 Ton, 30 Ton, 40 Ton and 50 Ton and two prototypes each of the thermic oil heater necessary for indirect heating in sizes 500000 KCal and 400000 K Cal capacities.	[TIFAC commit- ment - 44.02]	88.05	2 years In progress.

UPGRADATION OF TEXTILE MACHINERY

1 Technology Upgradation in Manufacture of Automatic Cone Winder	Tamil Nadu	The proposed project target is to achieve 70 % indigenisation in the period of 18-24 Months. With 70% of indigenisation it will be possible to offer the machine with a price difference of around 25-30% compared to	[TIFAC commit- ment 644.00)	1286	2 Years Project under progress.

		the landed cost of imported machines.			
2	Technology Development of Two for One Twister	Tamil Nadu	Development of two for one twister for spun yarn with air threading, pneumatic cradle lifting mechanism and tangential belt drive.	644 (TIFAC 322.00)	2 Years Project under progress. commitment
3	High Speed Comber	Tamil Nadu	To develop comber to run at 400 nips/min as against existing model run at 250 nips/min. Due to this the production will be 50 % more and the cost of manpower per kg of silver produced will be 30 % less	110 (TIFAC 55.00)	16 Mths Project under progress. commitment
4	Auto Leveller for Card	Tamil Nadu	Auto leveller deliver speed will be 220 meters/min. and productivity will be 70 Kg/hr. The auto leveling sensing will be very precise so that sliver CV% (5M) will be less than 1 %.	25(12.5)	16Mths Project under progress.
5	Twin Delivery Auto Leveller Draw Frame	Tamil Nadu	The proposed draw frame delivery speed will be 1000 meters/min. against existing model, which 600 meters/min. The auto levelleling sensing will be less than 0.4 % for sliver CV %(1m)	60 (TIFAC 26)	16 Mths Project under progress. commitment
6	Improved Surface Treated Ring	Tamil Nadu	Ring is a critical component in spinning machinery and the project aims to develop rings run at 25000 rpm will will give increased life of 20 % more	39 (TIFAC 19.50)	13 Mths Project under progress. commitment

UPGRADATION OF SCIENCE & ENGINEERING COLLEGES

1.	Shanmugha College of Engineering	Tamil Nadu	Upgrading a few selected science and engineeirng colleges to create centres of relevance and excellence in achieving new heights in education sector at par with world`s best	538.40 [TIFAC-248.70]	3 years In progress.
2.	PSG College of Engineering	Tamil Nadu	do	646.38 [254.77]	3 years In progress.
3.	Thapar Institute	Punjab	do	536.90 [291.90]	3 yrs In progress.
4.	JSS College of Pharmacy	Tamil Nadu	do	227.00	

[110.00] 3 yrs In progress.

5. NITIE Maharashtra do 260.00
[119.00] 3 yrs In progress.

6. MEPCO Schlenk Tamil Nadu do 105.80
Engineering [40.90] 3 yrs In progress.
College

7. Dibrugarh
University Assam do 207.00
[100.00] 3 yrs In progress.

TARGETTED PROGRAMMES IN OTHER IMPORTANT AREAS

Power sector

1. STATCOM & PST Andhra Pradesh
& Maharashtra Improving efficiency of 290.00 STATCOM- In progress.
electric power sector in 18 months
transmission and distrib-
ution networks. The project PST -
envisages designing and 18 months
development of prototypes
in the initial stages.

HYDROGEN ENERGY

1. Joint RV-TIFAC Karnataka Development of sustainable Rs.198 Each Specific Nil
Hydrogen Hydrogen economy technologies lacs specific Projects
Economy in the country: (TIFAC project are being
Technology commit- is time identified.
Development 1) Application of Aqua gas ment bound
Program in welding, cutting, 178 spanning
metallurgy etc. lacs) between
6 to 18
2) H2/Water induction to months
IC engines
3) Hydrogen generation
technologies

2. Development Tamil Nadu Indigenous development of Rs.30 24 mths Preliminary Nil
of Polymer Polymer electrolyte membrane lacs experiments
Electrolyte water electrolyser for with electrodes
Membrane Water hydrogen generation at and design of
Electrolyser atmospheric pressure as single cell
for Hydrogen well as high pressure and have been
Generation its field trials carried out.
Project is
progressing
well.

3. Trial runs of Gujarat To study and assess the techno- Rs.8 6 mths First trial Nil
Hydrogenation economic feasibility of hydro- lacs in laboratory
Process in genation process in solvent (TIFAC scale with
specialty oils & specialty oil manufacturing contri- specific
and solvents process to adopt in commercial bution distillate
manufacturing scale by the SMEs in and is Rs.4 done
process around Baroda to replace lacs)
highly polluting oleum
treatment process

ENERGY FROM MUNICIPAL WASTE

4. Energy recovery from Municipal Solid Waste	Andhra Pradesh	Processing of Municipal Solid Waste to make fuel pellets/ fluff and generation of elec- tricity (6.6 MW) using the pellets/fluff and thus to recover energy from MSW	Rs.1090 lacs for fluff and pellets by processing MSW (TIFAC providing techno- managerial support only)	phase-I of prod- uction of fuel for processing 700 TPD of garbage for producing fuel pellets.	Phase-I is over. the phase-I has been commissioned	NIL The Phase-I

S.No	Title of proj.	States covered	Objectives/field of study	Total project cost (Rs.in lacs)	Tenure made so far	Progress Any other relevant information.
1.	Upgradation of SME in pharma sector	Punjab, Haryana & Himachal Pradesh	Upgradation of SMEs in Pharma sector	7.00	1 year	Initial discussions held with the States and interested industries.

STATE INTERACTIONS

1. Uttaranchal Ramgarh Water Shed	Uttaranchal	Integrated planning for seven villages for sust- ainable economic activities. The overall objective is to improve the quality of life of the local people through development carried out in an integrated manner	117.26 [TIFAC commit- ment 21.31]		In progress.	
2. Design and Development of Airships	Uttaranchal	Design and Development of airships for transportation of goods and passengers in Uttaranchal	31.14			

HEALTH CARE SECTOR

1. Reports on Herbal and Natural Products & Floriculture		To present status and vision for herbal and natural products & floriculture in our country	1.50 lacs		Completed	

INITIATIVES TOWARDS REBUILDING AND REHABILITATION OF GUJARAT EARTHQUAKE REGION

1. Initiatives towards rebuilding and rehabilitation of Gujarat earthquake region	Gujarat	189.00	completed

PART-II

STATEMENT AS REFERRED IN REPLY TO PART (b) & (c) OF THE LOK SABHA UNSTARRED QUESTION NO. 417 DUE FOR REPLY ON 24.07.2001REGARDING NEW PROJECTS UNDERTAKEN BY TIFAC

S.No.	Project Title	States Covered
	Indian Council of Agricultural Research	
1.	Household Food and Nutritional Security	19 States
2.	Conservation of Agrobiodiversity	All States
	Department of Atomic Energy	
3.	Application of nuclear technology in medicine	Maharastra
	Department of Biotechnology	
4.	Development and production of new generation vaccines and diagnostics for infectious diseases	All States
5.	Biotechnological approaches for coffee improvement	All States
6.	Biotechnological approaches towards herbal product development	All States
7.	Setting up of mirror sites for genomic research	All States
	Council of Scientific & Industrial Research	
8.	Design and Development, fabrication and airworthiness testing of Light Transport Aircraft (LTA)	All States
	Ministry of Environment & Forests	

9. Setting up of NOIDA Botanical Garden	Noida & Uttar Pradesh
Ministry of Information Technology	
10. Technology Development for Indian Languages	Karnataka, Maharastra, WestBengal & Tamil Nadu`
11. National Programme for Braille Literacy with application of information technology	All States
12. National Programme for deployment of indigenously developed Integrated Medical LINAC for cancer therapy	All States
Department of Ocean Development	
13. Ocean thermal energy conversion	All States
Indian Council of Medical Research	
14. National Mission Mode Programme on Control of Thalassemia	All States
15. Jai Vigyan National Mission for Rheumatic Fever/ Rheumatic Heart Disease Prevention	All States
Department of Science and Technology	
16. Technology Mission for Visually Impaired	All States
17. Technology Mission for Himalayan Geology with special reference to prevention of natural disasters	Himalayan Region including North East
18. Area Development Mission for Andaman and Nicobar Islands through Science & Technology (a) Formulation of overall strategy (b) Biodiversity characterization at landscape level using satellite remote sensing and geographic information system in Andaman & Nicobar Islands	Andaman & Nicobar Islands
19. Jai Vigyan Swasthya Project for Rural Areas - A remote medical diagnostic system	Andhra Pradesh
Department of Space	
20. Cropping system studies using remote sensing and GIS	All States

21. Disaster Management Punjab, Orissa, West Bengal, Bihar & Jharkhand